

Claims

1. An ink cartridge in which ink is contained in a container body, having an ink supply port for supplying the ink to a recording head by engaging with an ink supply
5 needle communicating with the recording head in a state of being mounted to an ink cartridge mounting portion of a recording apparatus, said ink cartridge comprising: a retaining member having a projected portion engageable to and disengageable from an engaging portion formed at
10 the ink cartridge mounting portion and valve means having biasing means provided at the ink supply port, normally keeping a closed state of the valve means and opening the valve means to resiliently abut the projected portion to the engaged portion in a state of insertion of the
15 ink supply needle.

2. An ink cartridge in which ink is contained in a container body, having an ink supply port for supplying the ink to a recording head by engaging with an ink supply
20 needle communicating with the recording head in a state of being mounted to an ink cartridge mounting portion of a recording apparatus, said ink cartridge comprising:
a retaining member formed at one of wall surfaces opposed to each other and having a projected portion
25 engageable to and disengageable from an engaging portion

of the ink cartridge mounting portion, a pressed portion which is formed at other of the wall surfaces and an upper surface of which is pressed by a member of the recording apparatus, and valve means having biasing means provide
5 at the ink supply port, normally maintaining a closed state and resiliently abutting the projected portion to the engaging portion by being opened in a state of being inserted with the ink supply needle and resiliently abutting the pressed portion to the member of the
10 recording apparatus.

3. The ink cartridge according to Claim 1 or 2, wherein the valve means comprises a valve body and a coil spring.

15 4. The ink cartridge according to Claim 1 or 2, wherein the container body is provided with a projected portion for a stopper capable of pivoting the retaining member to a degree by which the projected portion can be detached from the ink cartridge mounting portion.

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5. The ink cartridge according to Claim 1 or 2, wherein the biasing means is provided with a length and an elastic force to a degree of moving a claw portion of the retaining member to outside of the region of the recessed portion
25 when an engagement between the retaining member and the

carriage is released.

6. The ink cartridge according to Claim 1 or 2, wherein
a stress of the biasing means is set to a range of 200g
5 through 700g at a time point of finishing to mount the
cartridge.

7. The ink cartridge according to Claim 1 or 2, wherein
the valve means comprises a sealing member for
10 resiliently abutting a surrounding of the ink supply
needle, a valve body brought into contact with the sealing
member and the biasing means for pressing the valve body
to the sealing member.

15 8. The ink cartridge according to Claim 1 or 2, wherein
the biasing means is provided with an elastic force to
a degree by which the container body is moved in a
direction opposed to an insertion direction against a
friction force between the sealing member and the ink
20 supply needle when the biasing means releases an
engagement between the retaining member and the carriage.